

Abstract of the Disclosure

A radially expandable fluid delivery device for delivering a fluid to a treatment site within the body is disclosed. The fluid delivery device is constructed of a microporous, biocompatible fluoropolymer material having a microstructure that can provide a controlled, uniform, low-velocity fluid distribution through the walls of the fluid delivery device to effectively deliver fluid to the treatment site without damaging tissue proximate the walls of the device. The fluid delivery device includes a tubular member defined by a wall having a thickness transverse to the longitudinal axis of the tubular member and extending between an inner and an outer surface. The wall is characterized by a microstructure of nodes interconnected by fibrils. The tubular member is deployable from a first, reduced diameter configuration to a second, increased diameter configuration upon the introduction of a pressurized fluid to the lumen. The tubular member includes at least one microporous portion having a porosity sufficient for the pressurized fluid to permeate through the wall. Substantially all of the nodes within the microporous portion are oriented such that spaces between the nodes form micro-channels extending from the inner surface to the outer surface of the wall.